

MICROCONTROLLER WITH EXPANDABLE PROGRAM MEMORY BANKS

Abstract

A microcontroller with expandable memory banks has a microprocessor, a plurality of memory banks with only one page for storing interrupt service routines (ISR), a memory bank control circuit connected to the microprocessor, and a multiplexer for connecting the microprocessor with the plurality of memory banks. The memory bank control circuit generates a selection signal according to an interrupt signal and a microprocessor interrupt service routine execution end signal. The multiplexer outputs a page selection signal from the microprocessor or outputs a predetermined page selection signal according to the output signal from the memory bank control circuit.